

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Marc Scott Hodes, *et al.*

Serial No.: 10/674,448

Filed: September 30, 2003

For: METHOD AND APPARATUS FOR CONTROLLING THE FLOW  
RESISTANCE OF A FLUID ON NANOSTRUCTURED OR  
MICROSTRUCTURED SURFACE

Group No.: 1797

Examiner: Jyoti Nagpaul

Confirmation No: 4121

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Sir:

**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. §41.41**

In response to the Examiner's Answer mailed October 1, 2009, the Appellants submit this  
Reply Brief under 37 C.F.R. §41.41.

## **I. Reply to Examiner's Arguments**

1) In response to the Appellants' arguments that grounds for objecting to Claims 1 and 5 have not been established, the Examiner has agreed to withdraw the grounds for objection.

2) In response to the Appellants' arguments that the final Office Action does not establish that Lobert anticipates Claims 1-6, the Examiner continues to maintain the rejection. The Appellants continue to disagree for at least the following reasons:

### First reason that anticipation has not been established

In response to the Appellants' argument that there is no evidence to show that Lobert teaches the closed cells as recited in Claims 1 and 5, the Examiner states:

It is the examiner's position that the groove of Lobert is a closed cell and further is a cell that is enclosed on all sides except for the side upon which a liquid is or could be disposed. Additionally, appellants have not claimed any specific shape as to what they define the recited closed cell. (Examiner's Answer, Page 7, section (10).

In response, the Appellants' maintain that there is still no evidence provided to show that Lobert teaches the closed cells as recited in Claims 1 and 5. Although the Appellants have not claimed any specific shape, they have clearly defined closed cells as, "a cell that is enclosed on all sides except for the side upon which a liquid is or could be disposed" (Detailed description, Page 8, Lines 11-13).

In contrast, as pointed out in the Appeal Brief (page 10-11), Lobert discloses grooved or saw-tooth structures that are open-ended structures which extend in a direction transverse to a flow direction. That is, structures having lateral ends by which a liquid can flow into or out of. Therefore the Appellants maintain that there is no evidence provided to show that Lobert discloses structures that are enclosed on all sides except for the side upon which a liquid is or could be disposed.

### Second and third reasons that anticipation has not been established

In response to the Appellants' arguments:

- a) that the Examiner is required to construe the corresponding structure for the "means for changing the pressure," and,
- b) that it has not been established that Lobert discloses "a particular and chosen movement and direction" that would cause a change in the pressure of a fluid in a closed cell that changes the degree of penetration of a liquid, as recited in Claim 1 or 5,

the Examiner argues that:

It is the examiner's position that Lobert teaches a waterborne, airborne and space vehicle that inherently have a chosen movement and direction of the moving body and also taking into consideration appropriately selected parameters such as flow velocity, flow direction, drag factors, etc that one can inherently infer that these are means for injecting and removing varying amounts of the fluid into and out of the cells and are equivalent to appellants means for injecting and removing varying amounts of the fluid into and out of the cells. Additionally, one can inherently change the pressure of a first fluid disposed within the plurality of closed cells in order to cause a selected liquid to change the degree of penetration of the feature pattern. (Examiner's Answer, Page 8-9, section (10))

In response, the Appellants maintain that the corresponding structure of Lobert for the "means for changing the pressure," has not been construed by the Examiner as required under 35 U.S.C. § 112, paragraph six. The Appellants also maintain that, as pointed out in the Appeal Brief (page 12), there is still no evidence provided to show that Lobert discloses the alleged, "particular and chosen movement and direction" that would cause a change the pressure of a fluid in a closed cell that changes the degree of penetration of a liquid, such as recited in Claims 1 or 5.

The Appellants respectfully maintain that the Examiner's positions taken regarding the above Appellants' arguments appear to be conclusory statements with no rational underpinning to support the asserted teachings by Lobert.

3) The Examiner's Answer does not provide further evidence or reasoning to refute the Appellants' arguments with respect to not establishing a *prima facie* case of obviousness to support

the rejection of dependent claims 12-13.

## **II. Conclusion**

For the at least the reasons set forth above and in the appeal brief filed July 13, 2009, the claims on appeal are not anticipated and are patentably non-obvious over the references as applied in the final rejection and Examiner's Answer. Accordingly, the Appellant respectfully requests that the Board of Patent Appeals and Interferences reverse the Examiner's Final Rejection of all of the Appellant's pending claims.

Respectfully submitted,

HITT GAINES, P.C.

A handwritten signature in dark ink, appearing to read "Ronald J. Corbett", with a stylized flourish at the end.

Ronald J. Corbett

Registration No. 47,500

Dated: December 1, 2009